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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/561,604

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EXAMINER

HIJAZ, OMAR F

ART UNIT

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/561,604	<b>Applicant(s)</b> BILOWOL, PETER	
	<b>Examiner</b> OMAR HIJAZ	<b>Art Unit</b> 3633	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 20 December 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 December 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>02/24/2006</u> .  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

This communication is a first Office Action Non-Final rejection on the merits. Preliminary amendment received on December 20, 2005 has been acknowledged, claims 24-25 have been cancelled and claims 1-23 are now pending, and have been considered below.

#### ***Drawings***

1. The drawings are objected to under 37 CFR 1.83(a) because they fail to show Figure 26 as described in the specification (page 4, line 18). Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required

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corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Objections***

2. Claims 1, 3-6, and 14 are objected to because of the following informalities:

In claim 1, at line 11, the recitation "setting reinforcing between" should be replaced with --setting reinforcing means between--.

In claim 3, at line 2, the word "utilising" is misspelled.

In claims 4-6, at line 2, the recitation "the quick release clamping device(s)" lacks antecedent basis.

In claim 14, at line 3, the recitation "modules" should not be plural. In addition, at line 4, the recitation "flanges" should not be plural.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 8 and 13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As per claim 8, the recitation "some of the panels are joined and others are not" renders the claim indefinite because the means of joining to which the applicant is referring to it is not clear.

As per claim 13, the recitation "from a surface below" renders the claim indefinite because a point of reference is unclear and vague.

The claims will be reviewed as best understood by the examiner.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 13 is rejected under 35 U.S.C. 102(b) as being anticipated by Johnson (U.S. Patent No. 5,860,262).

As per claim 13, Johnson teaches a method of creating a formwork (method for casting concrete structures; title) for a horizontal column (figure 18A) from a plurality of modules (panels 10), supporting the formwork from a surface below and integrating the columns with a floor slab (as illustrated, the columns are integrated with a floor slab; figure 18A).

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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8. Claims 1-6, 8, 14-15, are rejected under 35 U.S.C. 103(a) as being unpatentable over Scalamandre et al. (U.S. Patent No. 4,678,156) in view of Boeshart (U.S. Patent No. 4,936,540).

As per claim 1, Scalamandre et al. teaches a method of construction for concrete beams or walls (reusable concrete forms; title) comprising the steps of (a) setting rows of a plurality of boxing modules (form sections; figure 1) in an end to end relationship to create a formwork (as illustrated, the form sections are arranged in a row in an end to end relationship; figure 1), (b) fastening abutting ends of the modules (the adjacent form sections are mechanically secured together; col. 3, lines 13-16), and (c) spacing the formwork by a plurality of spacers which span between the module panels (spacer rods 12), (d) bracing and straightening the formwork as required (as illustrated, the forms are straightened and fully supported; figure 1; and it is well known in the art that formworks are braced and straightened as required), and (f) pouring concrete into the formwork (concrete forms; abstract).

Scalamandre et al. fails to disclose setting reinforcing between the formwork as require.

It is well known in the art to provide reinforcing means in concrete formworks.

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the concrete forms of Scalamandre et al. to include reinforcing means to strengthen the structure.

In addition, Scalamandre et al. fails to disclose the plurality of spacers is fixed by bolts, or push-in ties.

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Boeshart discloses a concrete form tie (abstract) whereby the spacers are fixed by ties (brackets 42).

Therefore from the teaching of Boeshart, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the spacer rods of Scalmandre et al. to include a tie fixing means as taught by Boeshart in order to adjust the spacing between the forms (col. 4, lines 26-29).

As per claim 2, Scalmandre et al. fails to disclose the spacers may be hollow tubular members or push-in ties.

Boeshart teaches push-ties (brackets 42).

Therefore from the teaching of Boeshart, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the spacer rods of Scalmandre et al. to include a tie fixing means as taught by Boeshart in order to adjust the spacing between the forms (col. 4, lines 26-29).

As per claim 3, Scalmandre et al. teaches the boxing modules are joined utilizing slots in side and end walls of the modules (slots 26 receive wedge bolts for mechanically securing adjacent form sections together; col. 3, 14-15).

As per claim 4, Scalmandre et al. teaches quick release clamping devices are used to join the side and end walls of the modules (slots 26 receive wedge bolts for mechanically securing adjacent form sections together; col. 3, 14-15).

As per claim 5, Scalmandre et al. teaches a quick release clamping device is a wedge (slots 26 receive wedge bolts for mechanically securing adjacent form sections together; col. 3, 14-15).

As per claim 6, Scalamandre et al. teaches a quick release clamping device is a strap, which joins respective ends of the modules, and sets the spacing between the modules (as illustrated, the spacer rods 12 provide for a quick attachment and detachment means, and set the spacing between the panels; figure 1).

As per claim 8, Scalamandre et al. teaches some of the panels of the formwork are joined and others are not (as illustrated, the adjacent form sections are joined; figure 1; it is construed that form sections which are not adjacent would not be joined).

As per claim 14, Scalamandre et al. teaches a formwork (reusable concrete forms; title) comprising a plurality of joined boxing modules (form sections; figure 1) in an end to end relationship (as illustrated, the form sections are arranged in a row in an end to end relationship; figure 1) wherein each boxing modules has front and rear faces (as illustrated, the form sections have front and rear faces; figure 1) and a continuous peripheral flange about the rear face (as illustrated, the form sections have continuous peripheral flanges; figure 1) said flanges having openings (slots 26) therein so that the boxing modules can be united via the flanges using quick release clamping devices (slots 26 receive wedge bolts for mechanically securing adjacent form sections together; col. 3, 14-15).

As per claim 15, Scalamandre et al. teaches the joined boxing modules are made parallel by a plurality of spacers spanning between the modules (as illustrated, the form sections are parallel utilizing spacer rods 12; figure 1).



As per claim 16, Scalamandre et al. teaches the quick release clamping devices are wedges (slots 26 receive wedge bolts for mechanically securing adjacent form sections together; col. 3, 14-15).

As per claim 17, Scalamandre et al. teaches the quick release clamping devices are straps (as illustrated, the spacer rods 12 provide for a quick attachment and detachment means; figure 1).

9. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Scalamandre et al. (U.S. Patent No. 4,678,156) in view of Boeshart (U.S. Patent No. 4,936,540), as applied to claim 1, and further in view of May (U.S. Patent No. 1,563,581).

As per claim 7, Scalamandre et al. teaches the individual modules comprise a rectilinear front face (as illustrated, the form sections are rectilinear; figure 1), a peripheral border wall extending from the front face (as illustrated, the form sections have a peripheral border extending from one face; figure 1), and a plurality of opposed slots in the peripheral border walls of the modules (as illustrated, each form section comprises a plurality of opposed slots in the peripheral borders; figure 1).

The Scalamandre et al. and Boeshart combination fails to disclose two spaced pairs of bolt sockets in major surfaces of the modules.

May discloses a concrete form (title) with spaced apart bolts and sockets utilized between panels (figure 2).

Therefore from the teaching of May, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the concrete forms

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of the Scalamandre et al. and Boeshart combination to include spaced apart bolts and sockets as taught by May in order to further adjust the spacing between the forms (col. 1, lines 10-13).

10. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Scalamandre et al. (U.S. Patent No. 4,678,156) in view of Boeshart (U.S. Patent No. 4,936,540), as applied to claim 1, and further in view of Trimmer et al. (U.S. Patent No. 4,407,480).

As per claim 9, the Scalamandre et al. and Boeshart combination fails to disclose the inner walls of the modules or panels are used to create designs or patterns in a formed wall.

Trimmer et al. discloses a concrete form (abstract) with a molding to create patterns on the concrete wall (abstract).

Therefore from the teaching of Trimmer et al., it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the concrete forms of the Scalamandre et al. and Boeshart combination to include panels which create patterns on a wall as taught by Trimmer et al. for aesthetics.

11. Claims 10-11 and 18-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Scalamandre et al. (U.S. Patent No. 4,678,156) in view of Boeshart (U.S. Patent No. 4,936,540), as applied to claims 1 and 14 respectively, and further in view of Mikus et al. (U.S. Patent No. 3,767,158).

As per claim 10, the Scalamandre et al. and Boeshart combination fails to disclose the formwork is reinforced by elongate straps or beams.

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Mikus discloses a concrete form construction (title) with elongated straps 24.

Therefore from the teaching of Mikus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the concrete forms of the Scalamandre et al. and Boeshart combination to include elongated straps as taught by Trimmer in order to further strengthen the panel assembly.

As per claim 11, the Scalamandre et al. and Boeshart combination fails to disclose straps or beams, which are adjustable to increase the strength of same.

Mikus discloses elongated straps 24 (it is construed that the straps are capable of being adjusted to accommodate for different length wall segments).

Therefore from the teaching of Mikus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the concrete forms of the Scalamandre et al. and Boeshart combination to include elongated straps which are adjustable as taught by Trimmer in order accommodate for different length wall segments.

As per claim 18, the Scalamandre et al. and Boeshart combination fails to disclose the formwork is braced and stiffened by elongate braces.

Mikus discloses a concrete form construction (title) with elongated braces (straps 24).

Therefore from the teaching of Mikus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the concrete forms of the Scalamandre et al. and Boeshart combination to include elongated straps as taught by Trimmer in order to further strengthen the panel assembly.

As per claim 19, the Scalamandre et al. and Boeshart combination fails to disclose braces, which are vertical, horizontal or angular.

Mikus discloses a concrete form construction (title) with elongated straps 24, which are horizontal (figure 1).

Therefore from the teaching of Mikus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the concrete forms of the Scalamandre et al. and Boeshart combination to include horizontal elongated straps as taught by Trimmer in order to further strengthen the panel assembly.

12. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Scalamandre et al. (U.S. Patent No. 4,678,156) in view of Boeshart (U.S. Patent No. 4,936,540), as applied to claim 1, and further in view of Alberti (U.S. Patent No. 6,405,505).

As per claim 12, the Scalamandre et al. and Boeshart combination fails to disclose the modules are joined together in a staggered formation.

Alberti discloses interlocking formwork whereby the panels are joined together in a staggered formation (as illustrated, the panels are staggered; figure 1).

Therefore from the teaching of Alberti, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the wall forms of the Scalamandre et al. and Boeshart combination to include staggered panels as taught by Alberti in order to provide a sturdy formwork.

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13. Claims 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Scalamandre et al. (U.S. Patent No. 4,678,156) in view of Boeshart (U.S. Patent No. 4,936,540), as applied to claim 14, and further in view of Sanders (U.S. Patent No. 4,949,866).

As per claim 20, the Scalamandre et al. and Boeshart combination discloses all the elements of the claimed invention, but fails to disclose the boxing modules are rotamoulded.

Sanders discloses a door cover, which is formed by rotational molding i.e. rotamolding (col. 2, lines 47-49).

Therefore from the teaching of Sanders, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the wall forms of the Scalamandre et al. and Boeshart combination such that they are rotamolded as taught by Sanders because it is easily reproducibly manufacturable (col. 3, lines 7-10).

As per claim 20, the Scalamandre et al. and Boeshart combination fails to disclose two modules are formed together with rota-moulding and then separated on removal from a mould.

Sanders discloses a door cover which is formed by rotational molding i.e. rotamolding (col. 2, lines 47-49) whereby a single piece may be rotamolded and subsequently cut in half so as to form two separate substantially identical parts (col. 2, lines 53-57).

Therefore from the teaching of Sanders, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the wall forms of

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the Scalamandre et al. and Boeshart combination such that two pieces are rotamolded out of a single piece as taught by Sanders because it is easily reproducibly manufacturable (col. 3, lines 7-10).

As per claim 22, Scalamandre et al. teaches the modules are provided with integral or external stiffening members (spacer rods 12).

14. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Scalamandre et al. (U.S. Patent No. 4,678,156) in view of Boeshart (U.S. Patent No. 4,936,540), as applied to claim 14, and further in view of Miller et al. (U.S. Patent No. 4,901,494).

As per claim 23, the Scalamandre et al. and Boeshart combination fails to disclose vertical and horizontal reinforcing bars which extend from the ends and top and bottom surfaces of the formwork.

Miller et al. discloses a forming system for a wall (abstract) with vertical and horizontal reinforcing means (figure 1).

Therefore from the teaching of Miller et al., it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the wall forms of the Scalamandre et al. and Boeshart combination to include vertical and horizontal reinforcing means as taught by Miller et al. in order to further strengthen the wall.

### ***Conclusion***

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Wilson (U.S. Pub. No. 2004/0128937) discloses a concrete form wall with securing strap members.

Bordener (U.S. Patent No. 6,517,897) discloses methods for manufacturing a solid surface via rotamolding.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to OMAR HIJAZ whose telephone number is (571)270-5790. The examiner can normally be reached on Mon-Fri 9:30 a.m. - 7:00 p.m. (alternating Fridays).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Glessner can be reached on (571)272-6843. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/Brian E. Glessner/

Supervisory Patent Examiner, Art Unit 3633